

Listing of the Claims

1-7 (Canceled)

8. (Currently Amended) A computer implemented best indicator adaptive (BIA) method for demand forecasting comprising the steps, performed by a computer, of:

~~computer-implemented~~ implementing a plurality of forecasting subsystems which make use of indicators Load (L), Ship (S) and Customer Acceptances (CA) history (CA_{hist});

~~computer-implemented~~ generating a forecast (CA_L) from Load (L) by modeling the ratio of quarter-to-date load to quarter CA actual as a random variable with gamma distribution so that the CA becomes a variable with generalized gamma distribution and computing the sample mean and sigma of the quarter-to-date load to quarter CA actual ratio for a final forecasted CA_L demand;

~~computer-implemented~~ generating a forecast (CA_S) from Ship (S) by modeling the ratio of quarter-to-date ship to quarter CA actual as a random variable with gamma distribution so that the CA becomes a variable with generalized gamma distribution and computing the sample mean and sigma of the quarter-to-date ship to quarter CA actual ratio for a final forecasted CA_S demand;

~~computer-implemented~~ generating a forecast (CA_{LS}) from Load and Ship (LS) by forecasting Customer Acceptances (CA) based on Load (L), Ship (S) and Customer Acceptances history (CA_{hist}) to generate CA_{LS} by estimating the functional relationship and the parameters relating the two ratios quarter-to-date load to quarter CA actual and quarter-to-date ship to quarter CA actual;

~~computer-implemented~~ generating a forecast from Customer Acceptances history (CA_{hist});

~~computer-implemented~~ refining the forecasts based on distribution demand using Customer Requested Date (CRAD) by

generating a forecast from Load (L) and CRAD as $CA_{L,CRAD}$,

generating a forecast from Ship (S) and CRAD as $CA_{S,CRAD}$, and

generating a forecast from Load (L) and Ship (S) and CRAD as $CA_{LS,CRAD}$;

for each forecast CA_L , CA_S , CA_{LS} , $CA_{L,CRAD}$, $CA_{S,CRAD}$, $CA_{LS,CRAD}$, and CA_{hist} , determining a forecast error;

computer-implemented eliminating CA_{LS} and $CA_{LS,CRAD}$ if data is for a historical period shorter than a predetermined period;

for all remaining forecasts, selecting the forecast having the forecast error that is the smallest error; and

outputting the selected forecast as an optimum forecast.

9. (Currently Amended) A computer implemented best indicator adaptive (BIA) method for demand forecasting comprising the steps of:

inputting Load (L), Ship (S) and Customer Acceptances (CA) quarterly history (CA_{hist}) data into a computer;

computer-implemented implementing on the computer a plurality of forecasting subsystems making use of four sources of information, Load (L), Ship (S), Customer Acceptances quarterly history (CA_{hist}), and Customer Request Date (CRAD);

computer-implemented forecasting by the computer Customer Acceptances (CA) based on Load (L) to generate CA_L by modeling a ratio of quarter-to-date load to quarter CA actual as a random variable with gamma distribution so that the CA becomes a variable with generalized gamma distribution whose mean and sigma are easily computed from the sample mean and sigma of the quarter-to-date load to quarter CA actual ratio;

computer-implemented forecasting by the computer Customer Acceptances (CA) based on Ship (S) to generate CA_S by modeling the ratio of quarter-to-date ship to quarter CA actual as a random variable with gamma distribution so that the CA becomes a variable with generalized gamma distribution whose mean and sigma are easily computed from the sample mean and sigma of the quarter-to-date ship to quarter CA actual ratio;

computer-implemented forecasting by the computer Customer Acceptances (CA) based on Load (L), Ship (S) and Customer Acceptances history (CA_{hist}) to generate CA_{LS} by estimating the functional relationship and the parameters relating the two ratios quarter-to-date load to quarter CA actual and quarter-to-date ship to quarter CA actual;

computer-implemented using a log mean to sigma ratio of CRAD distribution, adjusting,
by the computer, the forecasts CA_L , CA_S and CA_{LS} to arrive at more accurate forecasts $CA_{L,CRAD}$,
 $CA_{S,CRAD}$, and $CA_{LS,CRAD}$;
 computer-implemented for each forecast CA_L , CA_S , CA_{LS} , $CA_{L,CRAD}$, $CA_{S,CRAD}$, $CA_{LS,CRAD}$,
 and CA_{hist} , determining, by the computer, a forecast error;
 computer-implemented eliminating, performed by the computer, CA_{LS} and $CA_{LS,CRAD}$ if
 data is for a historical period shorter than a predetermined period;
 eliminating any other forecast due to expert knowledge;
 for all remaining forecasts, selecting, by the computer, the forecast having the forecast
 error that is the smallest error; and
 outputting, by the computer, the selected forecast as an optimum forecast.